

CLAIMS

1. Method for adapting a document so as to make it viewable on a terminal (11) having limited display capabilities, which method includes the following steps
5 of :
 - determining (21) processing and display capabilities of the terminal,
 - converting (23) a page of a document into a graphic or semi-graphic format chosen on the basis of the processing and/or display capabilities of the terminal, and
 - at least partially transmitting (25, 27) the image of the converted document page to the terminal, characterized in that it includes steps consisting of

10 analyzing (22, 30) the document page to be displayed by the terminal (11) so as to determine its characteristics, wherein the image resulting from the conversion has a resolution selected on the basis of the characteristics of the document, so that the contents of the document page can be read on the screen of the terminal.

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- 2. Method according to claim 1, characterized in that the determination (21) of the processing and display capabilities of the terminal comprises a step of
25 determining a display axis corresponding to an axis of a larger dimension of an image capable of being displayed by the terminal (11), wherein the analysis of the document page to be displayed comprises a step of determining a reading direction of the document page, and
30 the conversion of the document page is followed by a step of adapting the image resulting from the conversion, consisting of making the reading direction of the

document page coincide with the display axis of the terminal.

3. Method according to claim 1 or 2, characterized in
5 that it also includes a step (26) of extracting, from the
image resulting from the conversion, a band of which the
dimensions correspond to the maximum dimensions of an
image capable of being displayed by the terminal, and of
which the orientation in the image corresponds to the
10 reading axis of the document page, which image band is
transmitted to the terminal.

4. Method according to one of claims 1 to 3,
characterized in that the resolution of the image
15 generated by the conversion of a document page is
determined on the basis of the size of alphanumeric
characters present in the document page and on the basis
of the dimensions of the page.

20 5. Method according to one of claims 1 to 4,
characterized in that it includes a preliminary step of
selecting a portion of a document page to be displayed on
the screen of the terminal (11) including steps
25 consisting of converting the document page into a reduced
image having a format compatible with the processing and
display capabilities of a terminal, and with a resolution
selected so that the entire image can be displayed by the
terminal, and transmitting the reduced image of the page
to the terminal, wherein the user of the terminal then
30 has the possibility of selecting an area of the displayed
image, which selected area of the document page is then
converted to a resolution selected on the basis of the

characteristics of the document page, so that the contents of the document page can be read on the screen of the terminal.

- 5 6. Method according to one of claims 1 to 5, characterized in that if the document page is an image representing text, the analysis of the document page includes steps of recognizing the alphanumeric characters present in the document page and determining a main size
10 of the recognized alphanumeric characters, with the resolution of the image generated by the conversion of a document page being determined on the basis of the main size obtained.

- 15 7. Method according to one of claims 1 to 6, characterized in that the analysis of the document page consists of separating images and text contained on the page, wherein the conversion of the document page consists of generating, based on the text, images in an adapted format, and converting the format of the images so that they can be viewed on the terminal.

- 25 8. System for adapting a document so as to make it viewable on a terminal having limited display capabilities, which system includes an adaptation module (15) comprising means (13) for determining processing and display capabilities of a terminal (11), and means (17) for converting a page of a document into a graphic or semi-graphic format selected on the basis of the processing and display capabilities of the terminal,
30 which system also includes means for at least partially

transmitting the image of the converted document page to the terminal,
characterized in that the adaptation module (15) also includes means (18) for analyzing the document page to be
5 displayed by the terminal (11), so as to determine its characteristics, wherein the image resulting from the conversion has a resolution selected on the basis of the characteristics of the document, so that the contents of the document page can be read on the display screen of
10 the terminal.

9. System according to claim 8, characterized in that the means for determining the processing and display capabilities of the terminal include means for
15 determining a display axis corresponding to an axis of a larger dimension of an image capable of being displayed by the terminal, wherein the means for analyzing the document page to be displayed comprise means for determining a reading direction of the document page, the
20 adaptation module (15) includes means for adapting the image resulting from the conversion causing the reading direction of the document page to coincide with the display axis of the terminal.

25 10. System according to claim 8 or 9 characterized in that the adaptation module (15) further comprises means for cutting the image resulting from conversion into bands whose dimensions correspond to the maximum dimensions of an image capable of being displayed by the
30 terminal, and whose orientation in the image corresponds to the reading axis of the document page, and means for

successively transmitting toward the terminal the image bands and the image of the document page.

11. System according to claims 8 to 10, characterized in
5 that the adaptation module is integrated in a web server
(12) delivering documents to mobile terminals (11).

12. System according to one of claims 8 to 10,
characterized in that the adaptation module (15) is
10 integrated in a gateway (4) providing the interconnection
between a mobile telephone network (2) to which the
terminals are capable of being connected, and a data
transmission network (5) providing access to documents
capable of being viewed on the terminals.

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13. System according to one of claims 8 to 10,
characterized in that the adaptation module (15) is
integrated in a specialized server (10) connected to a
data transmission network (5) providing access to
20 documents capable of being viewed on the terminals (11),
wherein the terminals are mobile terminals capable of
being connected to a mobile telephone network (2)
interconnected with the data transmission network.